IN THE CLAIMS

A listing of the claims presented in this patent application appears below. This listing replaces all prior versions and listing of claims in this patent application.

1. (Original) The present invention relates to compounds of formula I:

I

its enantiomer, diastereomer, or pharmaceutically acceptable salt, hydrate or prodrug thereof wherein:

R₁ and R₂ independently represent

hydrogen, NR5R6, CR7R8R9, C(R)₂OR₁₄, CH₂NHR₁₄, C(=O)R₁₃, C(=NOH)H, C(=NOR₁₃)H, C(=NOR₁₃)R₁₃, C(=NOH)R₁₃, C(=O)N(R₁₃)₂, C(=NOH)N(R₁₃)₂, NHC(=X₁)N(R₁₃)₂, (C=NH)R₇, N(R₁₃)C(=X₁)N(R₁₃)₂, COOR₁₃, SO₂R₁₄, N(R₁₃)SO₂R₁₄, N(R₁₃)COR₁₄, (C₁₋₆alkyl)CN, CN, CH=C(R)₂, C(R₄)₂X₁SiR₁₆, (CH₂) pOH, C(=O)CHR₁₃, C(=NR₁₃)R₁₃, NR₁₀C(=X₁)R₁₃; or C5-10 heterocycle optionally substituted with 1-3 groups of R7, which may be attached through either a carbon or a heteroatom;

A represents C (when --- is present), CH or N (when --- is not present);

--- represents a bond;

represents aryl or heteroaryl, heterocycle, heterocyclyl or heterocyclic, provided that in the case of a heteroaryl, heterocycle, heterocyclyl or heterocyclic, provided that in the case of a heteroaryl, a cyclopropyl is not attached to a nitrogen atom on the ring;

R_x represents hydrogen or C₁₋₆ alkyl;

a

 R_3 represents $\stackrel{N}{\longrightarrow}$ which is an optionally substituted aromatic heterocyclic group containing at least one nitrogen in the ring and which is attached through a bond on any N, and which is unsubstituted or contains 1 to 3 substituents of R_7

R4 and R4a independently represent hydrogen, halogen, C₁₋₆ alkoxy, or C₁₋₆ alkyl

r and s independently are 1-3, with the provision that when $(R_{4a})_s$ and $(R_4)_r$ are attached to an Ar or HAr ring the sum of r and s is less than or equal to 4;

R₅ and R₆ independently represent

hydrogen, C₁₋₆ alkyl optionally substituted with 1-3 groups of halogen, CN, OH, C₁₋₆ alkoxy, amino, imino, hydroxyamino, alkoxyamino, C₁₋₆ acyloxy, C₁₋₆ alkylsulfenyl, C₁₋₆ alkylsulfinyl, C₁₋₆ alkylsulfonyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl, C₁₋₆ dialkylaminosulfonyl, 4-morpholinylsulfonyl, phenyl, pyridine, 5-isoxazolyl, ethylenyloxy, or ethynyl, said phenyl and pyridine optionally substituted with 1-3 halogen, CN, OH, CF₃, C₁₋₆ alkyl or C₁₋₆ alkoxy; C₁₋₆ acyl optionally substituted with 1-3 groups of halogen, OH, SH, C₁₋₆ alkoxy, naphthalenoxy, phenoxy, amino, C₁₋₆ acylamino, hydroxylamino, alkoxylamino, C₁₋₆ acyloxy, aralkyloxy, phenyl, pyridine, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylamino, C₁₋₆ dialkylamino, C₁₋₆ hydroxyacyloxy, C₁₋₆ alkylsulfenyl, phthalimido, maleimido, succinimido, said phenoxy, phenyl and pyridine optionally substituted with 1-3 groups of halo, OH, CN, C₁₋₆ alkoxy, amino, C₁₋₆ acylamino, CF₃ or C₁₋₆ alkyl;

C1-6 alkylsulfonyl optionally substituted with 1-3 groups of halogen, OH, C1-6 alkoxy, amino, hydroxylamino, alkoxylamino, C1-6 acyloxy, or phenyl; said phenyl optionally substituted with 1-3 groups of halo, OH, C1-6 alkoxy, amino, C1-6 acylamino, CF3 or C1-6 alkyl; arylsulfonyl optionally substituted with 1-3 of halogen, C1-6 alkoxy, OH or C1-6 alkyl;

C₁-6 alkoxycarbonyl optionally substituted with 1-3 of halogen, OH, C₁-6 alkoxy, C₁-6 acyloxy, or phenyl, said phenyl optionally substituted with 1-3 groups of halo, OH, C1-6 alkoxy, amino, C1-6 acylamino, CF3 or C1-6 alkyl; aminocarbonyl, C1-6 alkylaminocarbonyl or C1-6 dialkylaminocarbonyl, said alkyl groups optionally substituted with 1-3 groups of halogen, OH, C1-6 alkoxy or phenyl, five to six membered heterocycles optionally substituted with 1-3 groups of halogen, OH, CN, amino, C1-6 acylamino, C1-6 alkylsulfonylamino, C1-6 alkoxycarbonylamino, C1-6 alkoxy, C1-6 acyloxy or C1-6 alkyl, said alkyl optionally substituted with 1-3 groups of halogen, or C1-6 alkoxy; C3-6 cycloalkylcarbonyl optionally substituted with 1-3 groups of halogen, OH, C1-6 alkoxy or CN; benzoyl optionally substituted with 1-3 groups of halogen, OH, C1-6 alkoxy, C1-6 alkyl, CF₃, C₁-6 alkanoyl, amino or C₁-6 acylamino; pyrrolylcarbonyl optionally substituted with 1-3 of C1-6 alkyl; C1-2 acyloxyacetyl where the acyl is optionally substituted with amino, C1-6 alkylamino, C1-6 dialkylamino, 4-morpholino, 4-aminophenyl, 4-(dialkylamino)phenyl, 4-(glycylamino)phenyl; or R5 and R6 taken together with any intervening atoms can form a 3 to 7 membered heterocyclic ring containing carbon atoms and 1-2 heteroatoms independently chosen from O, S, SO, SO₂, N, or NR₈;

R7 represent

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hydrogen, halogen, CN, CO₂R, CON(R)₂, CHO, CH₂NHAc, C(=NOR), OH, C₁₋₆ alkoxy, C₁₋₆ alkyl, alkenyl, (CH₂)_namino, (CH₂)_nC₁₋₆ alkylamino, C₁₋₆ dialkylamino, hydroxylamino or C₁₋₂ alkoxyamino all of which can be optionally substituted on the nitrogen with C₁₋₆ acyl, C₁₋₆ alkylsulfonyl or C₁₋₆ alkoxycarbonyl, said acyl and alkylsulfonyl optionally substituted with 1-2 of halogen or OH;

R8 and R9 independently represents

H, CN,

C₁-6 alkyl optionally substituted with 1-3 halogen, CN, OH, C₁-6 alkoxy, C₁-6 acyloxy, or amino,

phenyl optionally substituted with 1-3 groups of halogen, OH, C1-6 alkoxy; or

R7 and R8 taken together can form a 3-7 membered carbon ring optionally interrupted with 1-2 heteroatoms chosen from O, S, SO, SO₂, NH, and NR₈;

X₁ represents O, S or NR₁₃, NCN, NCO₂R₁₆, or NSO₂R₁₄

R₁₀ represents hydrogen, C₁₋₆ alkyl or CO₂R₁₅;

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Each R₁₃ represents independently hydrogen, C₁₋₆ alkyl, C₆₋₁₀ aryl, NR₅R₆, SR₈, S(O)R₈, S(O)₂ R₈, CN, OH, C₁₋₆ alkylS(O)R, C₁₋₆ alkoxycarbonyl, hydroxycarbonyl, C₁₋₆ acyl, C₃₋₇ membered carbon ring optionally interrupted with 1-4 heteroatoms chosen from O, S, SO, SO₂, NH and NR₈ where said C₁₋₆ alkyl, aryl or C₁₋₆ acyl groups may be independently substituted with 0-3 halogens, hydroxy, N(R)₂, CO₂R, C₆₋₁₀ aryl, C ₅₋₁₀ heteroaryl, or C₁₋₆ alkoxy groups;

When two R₁₃ groups are attached to the same atom or two adjacent atoms they may be taken together to form a 3-7 membered carbon ring optionally interrupted with 1-2 heteroatoms chosen from O, S, SO, SO₂, NH, and NR₈;

R represents hydrogen or C₁₋₆ alkyl;

R₁₄ represents amino, C₁₋₆ alkyl, C₁₋₆ haloalkyl, five to six membered heterocycles or phenyl, said phenyl and heterocycles optionally substituted with 1-3 group of halo, C₁₋₆ alkoxy, C₁₋₆ acylamino, or C₁₋₆ alkyl, hydroxy and/or amino, said amino and hydroxy optionally protected with an amino or hydroxy protecting group;

R₁₅ is C₁₋₆ alkyl or benzyl said benzyl optionally substituted with 1-3 groups of halo, OH, C₁₋₆ alkoxy, amino, C₁₋₆ acylamino, or C₁₋₆ alkyl;

R₁₆ is hydrogen, C₅₋₁₀heteroaryl, C₆₋₁₀aryl, said heteroaryl and aryl optionally substituted with 1-3 groups of R₇;

m, n, p and q represents 0-1.

2. (Original) A compound according to claim 1 wherein R_1 and R_2 independently represent H, NR₅R₆, CN, OH, C(R)₂OR₁₄, NHC(=X1)N(R₁₃)₂, C(=NOH)N(R₁₃)₂, NR₁₀C(=X₁)R₁₃ or CR₇R₈R₉.

a or

- 3. (Original) A compound according to claim 2 wherein is phenyl, pyridine, pyrimidine, or piperidine.
- 4. (Original) A compound according to claim 3 wherein one of R_1 and R_2 is H and the other is NR₅R₆; H and the other is CN; or H and the other is NR₁₀C(= X_1)R₁₃.
- 5. (Original) A compound according to claim 4 wherein A is C, --- is present, and $Z=(O)_n$ where n=0; A is C, --- is not present and Z=H, OH or halogen or A is N, --- is not present and $Z=(O)_n$ where n=1.
- 6. (Original) A compound according to claim 5 wherein R₃ is 1,2,3-triazole, 1,2,4-triazole, 1,2,5-triazole, tetrazole, pyrazole, or imidazole, any of which may contain 1 to 3 substitutents of R₇.
 - 7. (Original) A compound which is:
- $1-[5(R)-3-[4-[(1\alpha,5\alpha,6\alpha)-6-amino-3-azabicyclo[3.1.0]hexan-3-yl]-3-fluorophenyl]-2-oxooxazolidin-5-ylmethyl]-1,2,3-triazole,$
- $1-[5(R)-3-[4-[(1\alpha,5\alpha,6\alpha)-6-amino-3-azabicyclo[3.1.0]hexan-3-yl]-3,5-difluorophenyl]-2-oxooxazolidin-5-ylmethyl]-1,2,3-triazole,$
- $1-[5(R)-3-[4-[(1\alpha,5\alpha,6\alpha)-6-[(t-butyldiphenylsilyl)oxy]]]$ methylbicyclo[3.1.0]hex-2-en-3-yl]phenyl]-2-oxooxazolidin-5-ylmethyl]-1,2,3-triazole,
- $1-[5(R)-3-[4-[(1\alpha,5\alpha,6\alpha)-6-[(t-butyldiphenylsilyl)oxy]]]$ methylbicyclo[3.1.0]hex-2-en-3-yl]-3-fluorophenyl]-2-oxooxazolidin-5-ylmethyl]-1,2,3-triazole,
- $1-[5(R)-3-[4-[(1\alpha,5\alpha,6\alpha)-6-hydroxyoxymethylbicyclo[3.1.0]hex-2-en-3-yl]phenyl]-2-oxooxazolidin-5-ylmethyl]-1,2,3-triazole,$
- 1-[5(R)-3-[3-fluoro-4-[(1α , 5α , 6α)-6-hydroxyoxymethylbicyclo[3.1.0]hex-2-en-3-yl]phenyl]-2-oxooxazolidin-5-ylmethyl]-1,2,3-triazole,

- 1-[5(R)-3-[4-[(1α ,5 α ,6 α)-6-cyanobicyclo[3.1.0]hex-2-en-3-yl]phenyl]-2-oxooxazolidin-5-ylmethyl]-1,2,3-triazole, 1-[5(R)-3-[4-[(1α ,5 α ,6 α)-6-cyanobicyclo[3.1.0]hex-2-en-3-yl]-3-fluorophenyl]-2-
- $1-[5(R)-3-[4-[(1\alpha,5\alpha,6\alpha)-6-cyanobicyclo[3.1.0]nex-2-en-3-y1]-3-fluorophenyl]-2-oxooxazolidin-5-ylmethyl]-1,2,3-triazole,$

or its enantiomer, diastereomer, or pharmaceutically acceptable salt, hydrate or prodrug thereof.

- 8. (Original) A pharmaceutical composition comprised of a compound in accordance with claim 1 in combination with a pharmaceutically acceptable carrier and optionally a in combination with a vitamin selected from the group consisting vitamin B2, vitamin B6, vitamin B12 and folic acid.
- 9. (Original) A method of treating or preventing a bacterial infection in a mammalian patient in need thereof, comprising administering to said patient an effective amount of a compound of claim 1.
- 10. (Original) A method of treating or preventing bacterial infection or an oxazolidinone-associated side effect by administering an effective amount of a compound of formula I of claim 1 and an effective amount of one or more of a vitamin selected from the group consisting of vitamin B2, vitamin B6, vitamin B12 and folic acid to a patient in need thereof.
- 11. (Original) A method according to claim 10 for treating or preventing oxazolidinone-associated normocyctic anemia, peripheral sensory neuropathy, sideroblastic anemia, peripheral sensory neuropathy, optic neuropathy, seizures, thrombocytopenia, cheilosis, hypo-regenerative anemia, megaloblastic anemia and seborrheic dermatitis by administering an effective amount of vitamin B2 to a patient in need thereof.